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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------------------|-----------------------------|
| 10/670,218 | 09/26/2003 | Makoto Mogamiya | P23811 | 6836 |
| 7055 7590 07/13/2007 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191 | | | EXAMINER PRABHAKHER, PRITHAM DAVID | |
| | | | ART UNIT 2622 | PAPER NUMBER |
| | | | NOTIFICATION DATE 07/13/2007 | DELIVERY MODE ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
pto@gbpatent.com

| | | | |
|------------------------------|--------------------------------|---------------------------------|--|
| Office Action Summary | Application No. 10/670,218 | Applicant(s) MOGAMIYA ET AL. | |
| | Examiner Pritham Prabhakher | Art Unit 2622 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-21 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

This application contains claims directed to the following patentably distinct species:

- Species I: Figure 3
- Species II: Figure 4
- Species III: Figure 5
- Species IV: Figure 6
- Species V: Figure 7
- Species VI: Figure 8
- Species VII: Figure 9
- Species VIII: Figure 10

The species are independent or distinct because the lenses are different in each one of the embodiments and would require a completely separate search by the examiner.

1. Species I requires that the infrared absorption filter 551 has a front and rear surface that are concave and convex respectively. The optical adhesive layer 561 functions as a plano-concave lens, and can shift the image point IP to the resultant image point IP'.

2. Species II requires that the infrared absorption filter 552 that has a front surface and rear surface that are concave and plane surfaces respectively. The front optical adhesive layer 562 is also different in structure from Species I.

3. Species III requires that the front and rear surfaces of the infrared absorption filter 553 are plane-parallel surfaces. The front and rear surfaces of the optical low-pass filter 573 are a convex surface and a concave surface respectively. The optical adhesive layer 563 and optical low-pass filter 573 are formed as a plano-concave cemented lens. There is an optical adhesive 583 positioned along the outer edge of the front surface of the protection glass 593. The optical adhesive layer 563 and the optical low-pass filter 573 can be fixed to the protection glass 593 by a leaf spring with a spacer positioned between the optical low-pass filter 573 and the protection glass 593, or the single-piece member and the optical low-pass filter 573 can be provided as separate members which are independently fixed to the protection glass 593.

4. Species IV requires that the infrared absorption filter 554 has front and rear surfaces that are plane-parallel. The front surface and the rear surface of the optical low-pass filter 574 are a flat surface and a concave surface respectively.

5. Species V is similar to Species I except that the lens block 53e is not provided with a transparent protection glass corresponding to the protection glass 591 shown in Species I or an optical adhesive layer corresponding to the rear optical adhesive layer 581 shown in Species I. The front surface and the rear surface of the infrared absorption filter 555 are a concave surface and convex surface, respectively. Front and rear surfaces of the optical low-pass filter 575 are plane-parallel surfaces. Also, the

refractive index of the optical adhesive layer 565 is greater than that of the infrared absorption filter 555 and therefore the optical adhesive layer 565 also functions as a plano-concave lens. The thickness of the lens block 52E is smaller than that of 52A in Species I.

6. Species VI is similar to Species II except that the lens block 52F is not provided with a transparent protection glass corresponding to the protection glass 592 shown in Species II or an optical adhesive layer corresponding to the rear optical adhesive layer 582 as depicted in Species II. The front surface and the rear surface of the infrared absorption filter 556 are a concave surface and a flat surface respectively. Front and rear surfaces of the optical low-pass filter 576 are plane-parallel surfaces. The thickness of the lens block 52F is smaller than that of 52B in Species II.

7. Species VII has the lens block 52G that is provided with a transparent protection glass 597 and an optical adhesive layer 60, and is not provided with either an optical low-pass filter or an infrared absorption filter. The front surface and the rear surface of the protection glass 597 are a concave surface and a convex surface, respectively. Space between the protection glass 597 and an imaging surface 537 of the image pick-up device 51G is filled with the optical adhesive layer 60.

8. Species VIII has the lens block 5H consisting of only a transparent protection glass 598, and is not provided with either an optical low-pass filter or an infrared absorption filter. The front surface (incident surface) and the rear surface of the protection glass 598 are a concave surface and a flat surface respectively. Space between the protection glass 598 and an imaging surface 538 of the image pick-up

device 51H is not filled with an optical adhesive layer such as the optical adhesive layer 60 in Species VII.

Species I-VIII represent distinctly different lens designs and are therefore independent inventions.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1 and 2 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the

requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103 (a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pritham Prabhakher whose telephone number is 571-270-1128. The examiner can normally be reached on M-F (7:30-5:00) Alt Friday's Off.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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